

ABSTRACT

Methods, searchers, base stations are provided which search for known codes contained in signals received over wireless channels, from mobile units for example. A coherent correlation is performed between an expected known code, and portions of the received signal during periods which are separated in time. Advantageously, by making the correlation periods separated in time, time diversity is realized such that if one or more of the correlation periods exist while the signal is of poorer quality, for example due to a fade, the remaining correlation periods may still yield a meaningful search statistic. Searching is done during time slots defined with reference to system time, not mobile unit time. Advantageously, this makes the searcher design simpler and more efficient. By performing time diversity searching in this manner, search tasks for one mobile unit(s) can be performed between the search task periods for another mobile unit resulting in a more efficient utilization of searcher resources.

097022768.110100